

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): Fouling reducing device for ~~the use inside~~ tubes of a tubular heat exchanger ~~of the type that comprises at least one turbulence generating element lodged inside one of the tubes of said exchanger, comprising a turbulence-generating element,~~

wherein said turbulence-generating element is ~~and~~ brought, during its use, in contact with an environment that contains ~~hydrocarbons, namely crude oil, characterized in that~~

~~said turbulence-generating element, meant to come in contact with the hydrocarbons is made of~~ comprises a metallic alloy whose nickel content is greater than 50% by weight and ~~furthermore~~ includes at least one metal ~~chosen from among~~ selected from the group consisting of chrome and molybdenum to improve its resistance to corrosion, and

said turbulence-generating element is in the form of a solenoid.

Claim 2 (currently amended): Device as set forth in claim 1, ~~characterized in that~~ wherein the metallic alloy ~~of which it is made~~ has a chrome content, TCr, and a molybdenum content, TMo, expressed in % weight of the alloy, so that the following relation is ~~verified~~ met:

$$\text{TCr} + 3.3 \times \text{TMo} > 36\% \text{ by weight of the metallic alloy.}$$

Claim 3 (currently amended): Device as set forth in claim 1, ~~characterized in that~~ wherein the metallic alloy ~~of which it is made is comprised~~ comprises of the following metals, in the following content ranges ~~as indicated~~, in % by weight:

~~—nickel:~~ between 55 and 65% of nickel;

~~—chrome:~~ between 20 and 25% of chrome;

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~~molybdenum~~: between 5 and 10% of molybdenum;

~~niobium~~: between 2.5 and 4% of niobium; and

~~iron~~: to complete at 100% the remainder of iron.

Claim 4 (currently amended): ~~Application of the~~ A method of reducing fouling in a crude oil refinery exchanger, comprising lodging at least one device as set forth in claim 1 inside a tube of said exchanger, to exchangers used in crude oil refineries.

Claim 5 (new): Device as set forth in claim 1, wherein said solenoid is an unstretchable solenoid.

Claim 6 (new): Device as set forth in claim 1, wherein said solenoid is an elastic solenoid.